

Descriptions of Twenty-four New Species of Spiders lately discovered in Dorsetshire and Hampshire; together with a List of rare, and some other hitherto unrecorded, British Species.
By the Rev. O. PICKARD-CAMBRIDGE, M.A.

Family SALTICIDÆ.

SALTICUS CITUS.

Female, immature. Length 1-fourth of an inch. Length of cephalothorax 5-thirty-seconds. Relative length of legs, 4, 1, 3, 2.

Cephalothorax large, square and massive, sloping abruptly at the hinder part, and slightly compressed behind each posterior eye, glossy and sparingly clothed with hairs. Colour black-brown, paler and with a reddish tinge on the upper side, especially in the ocular region, which is circled with a band of yellowish hairs, commencing on either side below the outer eyes of the front row.

Eyes eight, forming three sides of a square; the front side curved. The two centre eyes of the front row more than double the size of the end ones of the same row. The centre eyes of the side rows are very small, and rather nearer to the hinder than to the front eyes of these rows.

Abdomen small, of a slender oviform shape, and of a deep black colour. The upper side has a transverse band at the front extremity, formed of pure glistening white hairs; this band is of a somewhat semicircular or rather crescent shape. Towards the spinners are four intensely white spots, two on each side of the medial line, those nearest the spinners being the smallest and nearest together. Along the centre of the hinder half of the abdomen are two reddish dentated lines formed by red hairs, and making a pattern of an oblong form with dentated sides. Under side paler than the upper, and has four pale white longitudinal lines converging towards the spinners. Plates of the spiracles pale white.

Palpi of moderate length. Colour black. The radial, cubital and humeral joints have their upper sides fringed with intensely white longish hairs.

Legs longish and stout (the first pair much the stoutest, fourth pair longest, first pair next in length, and second pair shortest), clothed with hairs and black spines. Colour blackish, with a

greenish tinge; the tarsal and metatarsal joints being pale murky yellowish.

Falces short, stout, and inclined towards the maxillæ. Their colour is a rich dark brown.

Maxillæ and labium of a pale murky brown, palest at the extremities.

I have described this distinctly marked and very active species from an immature female, kindly given me alive by Mr. Samuel Stevens, who captured it in August, 1862, among orchideous plants in the conservatory of Mr. G. Read, at Burnham, near Bridgewater, Somerset. Mr. Stevens says it was of frequent occurrence there, and was cherished by Mr. Read on account of its services in destroying insects injurious to his plants. He conjectured that it might have been imported from South America among some of his plants. This may have been so; still, as it appears to be of an undescribed species, and has nothing particularly foreign about its appearance, I have described it as a British spider, leaving it to future observations to determine whether it is an imported species or not.

SALTICUS COCCO-CILIATUS.

Male, adult. Length 1-tenth of an inch. Length of cephalothorax 1-eighteenth. Relative length of legs, 4, 3, 1, 2.

Cephalothorax oblong and massive, sloping abruptly behind. Colour dull yellow-brown, with a reddish hue, obscurely mottled with fine blackish spots. The margins are clouded with blackish. The square bounded by the eyes jet-black, and continued in a tapering form to the hinder margin; it is thinly clothed with red and blackish hairs. The four eyes of the front row are surrounded with a sort of iris, or cilia of bright scarlet sessile hairs; this iris is broadest on the lower margins of the eyes, and gives the spider a very remarkable appearance.

Eyes eight, forming three sides of a square; the front side slightly curved; the sides straight. The two central eyes of the front row are very much larger than that on either side, and the space between them is rather wider than that between each and the outer eye on its side. The intermediate eyes of the side rows are much the smallest, and they are equidistant from the other two eyes of the row, and in the same straight line.

Legs moderately long, very stout and strong; clothed, but not very thickly, with black and yellowish hairs, and black spines. The

two foremost pairs are jet-black, except the tarsi, which are greenish yellow. The two hind pairs are also jet-black, but have the tibial, tarsal and metatarsal joints annulated with reddish yellow. In some specimens all the legs have the two joints nearest the sternum of a greenish yellow, with blackish blotches.

Maxillæ strong, broad at the extremity, where they are rounded on the inner margins; slightly inclined to the labium. Their colour is the same as that of the cephalothorax, but paler at the top; that of the labium (which is short but broad at the base, and rather pointed at the top) is somewhat darker than that of the maxillæ.

Sternum of a blackish brown colour.

Palpi short, stout. Colour greenish yellow-brown, mottled with black. Radial joint shorter and smaller than the cubital, and, with the digital joint (which is large and shining black), has its upper side furnished with long shining white hairs: these form a very marked and striking contrast with the black cephalothorax and scarlet irides. Palpal organs prominent and highly developed, but not very complicated in structure; they have a strong black spine, curved in a circular form towards their extremity; this spine springs from their inner side, and is closely attached to their surface: their colour is brownish yellow, tinged with greenish.

Abdomen oviform, slightly shorter than the cephalothorax, over which it does not project much. Its colour is black-brown, thickly clothed with black hairs on the upper side, where it is marked with two strongly dentated longitudinal lines throughout its whole length; and from the outer angular points of these lines three or four curved ones run obliquely to the inner side: all these lines are formed by longish coppery red hairs thinly disposed, and are sometimes not easy to make out, especially as in capturing the spider they are liable to be displaced and rubbed off.

The female is rather larger than the male, and has the cephalothorax not so broad and massive as in that sex. Her palpi are yellow, fringed on the upper side with white hairs mixed with a few long black ones, and she wants the scarlet hairs round the anterior eyes. The cephalothorax is black, covered with black and coppery hairs. Her abdomen is in general more distinctly marked, though in pattern like that of the male; and the under side is brown, clothed with

palish hairs. The plates of the spiracles are yellowish, and her legs are also yellowish, annulated with red-brown.

This very pretty and distinct Salticus was discovered by myself on Bloxworth Heath, in the young state, in May, 1861; and in June, 1862, I met with adults of both sexes. It is an exceedingly active spider, and appears to prey, among other things, on the small black ants which are not rare where this spider occurs. One of those that I captured had in its falces a young ant, for which it must have entered the ant's burrows. Another had just made a prey of one of the spring-tails (*Poduræ*).

Family THOMISIDÆ.
PHILODROMUS DELETUS.

Female, immature. Length 3-sixteenths of an inch. Length of cephalothorax 1-tenth. Relative length of legs, 2, 1, 4, 3.

Cephalothorax large, circular, compressed at the eyes; clothed sparingly with short yellowish hairs. Colour dull sandy yellow, slightly darker on the sides. A dark yellowish brown stripe occupies the medial line of the hinder half; on each side of this stripe is a band of the same colour, scalloped out on either margin. The intervals of the scallops on the outer margin are paler than the rest of the cephalothorax, and form a short series of pale patches or blotches.

Eyes black, small, of nearly uniform size, and forming a semicircle; the two centre ones of the front row slightly the largest, and nearer together than the two corresponding ones of the hinder row.

Legs long, of the same colour as the cephalothorax, furnished with hairs and a few spines of different sizes, and scantily and irregularly marked with dark yellow-brown blotches and spots. The under sides of the tarsal and metatarsal joints are thickly clothed with strong papillæform hairs, which spread outwards on each side, and form quite a tuft at the articulation of these two joints. The metatarsal joints of the fourth pair have but a few of these hairs.

Abdomen broader at the middle than at the extremities, rather darker coloured than the cephalothorax, clothed with hairs. A large fusiform band of dark yellow-brown, edged with pale yellowish, scalloped on each outer margin, and, ending in a fine point, runs down the centre to about a third of its length

from the spinners; the scalloping of the margins of this band leaves two angular points on each side of it. The sides of the abdomen towards the spinners have four or five rows of more or less distinctly marked pale yellowish white spots, varying in size; and now and then two or more spots are confluent: these rows run obliquely backwards from the upper to the under side. The under side, sternum and maxillæ are clothed with hairs, and of the same colour as the cephalothorax and legs. The falcæ and labium are rather darker.

Three females of this species were captured by myself, in June, 1862, running in bright sunshine on the sand-hills at Bournemouth, in Hampshire; but I was unable to discover the male. In the character of the markings this spider bears some resemblance to *Philodromus elegans* (Blackwall's 'British and Irish Spiders,' p. 94), but may be easily distinguished by its paler and more "washed-out" appearance, by the markings being all far less vivid, and by its shorter and more robust form; the bands on the cephalothorax differ from those of *P. elegans* in being *narrower*, scalloped on the margins, and so with *several angular points on each side*; the central band also of the abdomen has, in *P. elegans*, only *one* angular point on each side. This spider, which is also allied to *Philodromus fallax* (Sundevall), is, I think, quite distinct from that species; and though far less striking looking than *P. elegans*, is yet a very distinctly marked one. When at rest on the bare sand, with its legs extended, it was quite invisible, and only caught the eye by its very rapid movements, composed of sundry short runs.

PHILODROMUS HIRSUTUS.

Female, adult. Length 3-twentieths of an inch. Length of cephalothorax 1-twentieth. Relative length of legs, 4, 2, 3, 1.

Cephalothorax of a dull yellowish drab-colour, sparingly clothed with short brownish and yellowish hairs, amongst which are some long black bristly nearly erect ones; those on the forehead are very long and directed forwards. It has three longitudinal bands, of a blackish brown colour—one, down the centre, commences at the two centre eyes of the hinder row (which it includes); it has the margins scalloped, and tapers to a point at the hinder part of the cephalothorax: the other two bands commence at the outer eye on either side, and increase in breadth towards the hinder part, where they end abruptly.

Eyes black. The outer ones of the front row (which is exactly on the upper edge of the forehead) are rather the largest of the eight, and considerably larger than the two middle ones of the same row; these four eyes are equidistant from each other. The hinder row is much the longer, and rather less curved than the front row; the eyes composing it are equidistant from each other, the two central ones being slightly smaller than the outer ones.

Legs moderate in length, rather robust, of the same colour as the cephalothorax, and similarly furnished with hairs and fine spines. The tarsal and metatarsal joints have two rows of papillæform hairs on their under side; but this character is not nearly so strongly marked as in *P. deletus* (above described).

Palpi like the legs in colour, and similarly clothed with hairs and spines.

Maxillæ and falces similar in colour and clothing to the palpi, but the bristly hairs on the maxillæ are not of such a marked character.

Sternum and labium yellowish drab, freckled with dark brown, and clothed with brown hairs.

Abdomen oval, rather abruptly truncated at the upper end, and not very sharply pointed at the spinners. Colour slightly paler than that of the cephalothorax. Clothed with short yellowish brown hairs, and, like the cephalothorax, legs, &c., the upper part and sides are furnished with long erect blackish bristly ones. On the upper side are five dark brown lines or bands, formed by spots and blotches more or less near together; one of these bands is of a diamond shape much elongated; it runs down the centre, ending about half-way towards the spinners, and is continued towards them by one or two isolated spots of the same colour; on either side of the hinder part of this band is another, these two coming together in a point just above the spinners; and on each upper margin of the forward end of the abdomen is another, running (at first continuously and then with irregular dots) round the whole margin towards the spinners; sundry small spots of the same colour as these bands may be seen dispersed between them, and from these spots spring the most conspicuous of the bristly hairs. On each side of the abdomen, towards the under part, is another broad longitudinal band of the same colour, reaching nearly, but not quite, to the spinners. Three longitudinal bands of rather a lighter

brown (and of which the centre one is much the widest) occupy the under side, and converge towards the spinners, where they are connected by a transverse line of the same hue, composed of short hairs; the central band is interrupted at the site of the sexual aperture, and in the part of it next the sternum there are two pale spots. The sexual organs are of a horse-shoe shape, slightly prominent and edged with red-brown.

This spider, which is closely allied to the genus *Thomisus*, was captured by myself on a gate-post at Bloxworth, Dorset, in June, 1862. It is unlike any other spider of this family that I have met with, and, from being almost wholly clothed with long black bristly hairs, presents a very striking appearance.

Family DRASSIDÆ.

CLUBIONA RECLUSA.

Male, adult. Length 1-fifth of an inch. Length of cephalothorax 1-tenth. Relative length of legs, 4, 1, 3, 2.

Cephalothorax slopes gradually into a slightly curved outline from the centre to the eyes, where it is slightly compressed on the sides. It has a slight longitudinal indentation in the medial line of the hinder part. Colour yellowish, tinged with red. The margins are red, and sundry veinings of a reddish brown run from the eyes and lateral margins to a point in the centre. It is clothed with short yellowish hairs, which considerably obscure the veinings, except when seen in spirits of wine.

Eyes eight, in two curved rows, the curves directed backwards. The foremost row is nearly straight, and is just above the frontal margin; the eyes of this row are about equidistant from each other; the centre ones are the darkest coloured, and slightly the largest of the eight. The centre ones of the hinder row are further from each other than each is from the end one on its side; the eyes of this row are about equal in size, and, with the end ones of the front row, are edged with deep bistre-brown, and in two out of three specimens that have come under my notice the eyes themselves were tinged with the same colour: in one specimen the brown colour almost approached to black. The lateral pairs of eyes are not contiguous, being separated rather further from each other in an oblique direction than the one forming the end eye of the front row is from the next to it in that row.

Legs long. Colour pale yellow. Clothed sparingly with hairs and a few longish black spines. The fourth pair are the longest, and the third pair the shortest, and but little shorter than the second pair.

Maxillæ same colour as the legs. Longish, straight, enlarged at the tops, where they are rounded on the outer sides. The inner sides are obliquely hollowed, and thickly clothed with short black hairs.

Labium tinged with reddish brown, broader at the top than at the base. The top is slightly hollowed or notched.

Falces straight and cylindrical, but neither remarkably long nor stout. Rather darker coloured than the cephalothorax, and cut away on the inner sides near their extremity in an obliquely transverse line.

Sternum long-oval, pointed near the abdomen. Colour yellowish, sometimes suffused with blackish brown.

Palpi short and stout. Cubital joint slightly clavate, and the margin underneath protuberant; it is longer than the radial joint, which is enlarged at its extremity, and has on the outer side three strong projections or apophyses, of a deep black-brown colour tinged with red—one, towards the front, is broad, with the extremity hollowed out or notched; another, less strong than the former, projects just behind it, at right angles to the joint, and has its extremity sharply bent forwards; the third is flattish, and has the appearance of a dagger-blade slightly folded on one side; it is the longest of the three, and has a sharp point; it issues from beneath the other two, and applies closely to the digital joint, rather underneath on its outer side, extending to nearly half its length. The radial joint has also two slight conical protuberances at its extremity—one on its upper side, the other on the inner side. The digital joint is long-oval and hairy, its colour yellowish, slightly suffused with brown. Palpal organs simple and not very prominent; from their extremity on the inner side there projects a short, stout, slightly curved, dark black-brown spine; and from their extremity towards the inner side is a longish, narrow, semitransparent projection, in contact with which is the prominent sharp point of a slender reddish spine; this spine issues from underneath the extremity of the palpal organs, but its true origin and situation I could not satisfactorily ascertain; but apparently its origin is underneath the outer extremity of the outer lobe.

Abdomen long-oval, of a deep brownish red colour thickly freckled with yellowish, and thickly clothed with yellowish hairs. At the front extremity there are a few stiff, strong, dark hairs, curving upwards and slightly backwards. When in spirits of wine there may be traced a pale yellowish medial line on the forward half of the upper side, followed by some transverse angular ones towards the spinners, which are long, prominent, and of a dull yellow colour; the upper ones suffused with brownish red. Plates of the spiracles yellow, and two yellow lines, running from the outer side of the spiracles, converge to the spinners.

The female is rather larger than the male, and much darker coloured (which is usually the case with females of this genus after the deposition of their eggs); the falces are also shorter and stouter, and their profile, instead of being nearly straight, is much curved outwards, owing to the base of the falces being far more prominent in front than in the male.

The male of this species bears some resemblance to the male of *Clubiona holosericea* in the form of the palpi, but its general appearance is more like that of *C. amarantia*; and for this latter species it was mistaken by Mr. Meade, who has for several years had it among specimens of *C. amarantia*, but cannot remember where it was captured. I have, during the summer of 1862, met with it at Bloxworth, Dorset, in woods. The females were abundant, sewn up, with their eggs, in leaves of low-growing plants, principally in leaves of young plants of *Angelica sylvestris*. The season for the males was evidently passed: the only one of this sex I met with was enclosed in a leaf, like the females, but, unlike them, there was a place of exit left in the folded leaf. In some of the leaves the young were hatched, and the old females seemed to be exhausted and nearly dead: their nests were to all appearance hermetically sealed, for I could find no entrance in any direction, every corner being closely sewn up with white silky web. The eggs were enclosed in a flattish lenticular cocoon of the same material.

In the veinings on the cephalothorax this species resembles *Clubiona brevipes*, but the male palpi differ totally in the form of the radial joint; and by the form of this joint it may also be distinguished at once from both *C. amarantia* and *C. holosericea*. From this latter species it may be known also by its yellower colour, and coarser hairs on the abdomen, the appearance of *C. holosericea* being gray, soft and

silky; the radial joint of the palpi of *C. holosericea* also wants the stout notched projection at its extremity in front.

Family CINIFLONIDÆ.

CINIFLO PUTA.

Female, immature. Length 1-fifteenth of an inch. Length of cephalothorax 1-thirty-first. Relative length of legs, 4, 1, 2, 3. Cephalothorax broadly truncated in front, and slightly compressed on the sides forwards. It is rather convex behind the eyes, towards which it slopes gradually. Hinder slope abrupt, and with a broadish, shallow, longitudinal indentation. Colour yellow-brown; margins and ocular region rather darker. The hinder part has some long bristly hairs, slightly directed forwards.

Eyes in two curved rows; the curves directed backwards; the hind row the most strongly curved. The eyes of that row are about equidistant from each other; the end ones are the largest. The two centre ones of the front row are dark-coloured, and rather closer together than each is to the end one on its side. The eyes of the lateral pairs near together, but not contiguous; the front eye of these pairs the largest of the eight. The front row is situated close above the frontal margin.

Legs stout, moderate in length, clothed with hairs and spines, and with a calamistrum on the upper side of the metatarsi of the hinder pair. Colour yellowish, tinged with brown.

Falces short, very powerful, slightly compressed at their base on the sides, prominent in front. Hairy, and similar in colour to the cephalothorax.

Maxillæ strong, hairy, slightly inclined to the labium, which is longer than broad, and squarish at the top. These parts are similar in colour to the falces, the labium being rather darker.

Sternum broad, convex, heart-shaped and hairy. Colour yellowish brown, mottled with darker brown, and the margin bounded by a dark brown line.

Palpi moderately long, hairy, and like the legs in colour.

Abdomen large, very convex above, abruptly sloping at the spinners, and much projecting over the base of the cephalothorax. It is clothed with hairs, of which there are a good many strong dark ones just underneath the upper end, directed upwards and forwards. Colour yellow-brown, thickly mottled and suffused

with darker brown. Plates of the spiracles paler. On the upper side towards the cephalothorax are several longish, obscure, pale yellow-brown spots, forming somewhat of an oblong figure; these are followed towards the spinners by some shortish transverse angular lines of the same colour (formed by short pale yellowish hairs), the angles directed forwards.

The specimen above described was not quite adult, but is distinct from any species I have seen, and is, I believe, a species hitherto undescribed. It may easily be distinguished by its general plain yellow-brown colour, and the obscurity of the pattern on the abdomen. It was captured by myself at Bloxworth, in 1861.

Family AGELENIDÆ.

AGELENA BOOPIS.

Female, immature. Length 1-fifteenth of an inch. Length of cephalothorax 1-thirty-second.

Cephalothorax compressed on the sides forwards, and slightly prominent at the eyes. Colour dull yellow, suffused with sooty brown. The space occupied by the eyes is black. A sharply angulated yellow patch, with the angle directed backwards, commences close behind each of the two central eyes of the hinder row; these patches are separated from each other by a fine blackish longitudinal line. There is a slight rise in the cephalothorax, followed by a transverse dip, behind which, on each side, is an oblique yellow line.

Eyes in two rows, on the, almost vertical, front of the cephalothorax, and very unequal in size. The front or lower row is nearly straight; the upper one is the longest, and very much curved, the curve directed backwards. The eyes of the lower row are equidistant from each other, the end ones being rather smaller than the centre ones, and the smallest of the eight. The central eyes of the upper row are very disproportionately large, protruding and wide apart, their outer rims extending nearly to the entire length of the lower row. The outer eyes of the upper row are about the same size as the centre eyes of the lower row; and the space between the centre ones of the upper row is greater than that between each of them and the end one on its side.

Legs short, moderately stout. Colour dull straw-yellow, with a

faint appearance of being annulated with sooty brown. Sparingly clothed with hairs and a few long black spines.

Falces moderate in length and strength, convex and protuberant in front near their base. Hairy, and like the cephalothorax in colour.

Maxillæ same colour as the falces, slightly inclined towards the labium, which is rather broader at the base than at the top, where it is flat, rounded at the corners, and, with the sternum, of the same colour as the maxillæ.

Abdomen oval, convex above, and projecting greatly over the base of the cephalothorax. Colour pale straw-yellow, slightly suffused with sooty points on the sides and upper side forwards. No trace was visible of any pattern, but this may have been owing to its very immature state. Spinners very unequal in length; upper one of each of the side pairs much the longest.

The specimen from which I have described this species was evidently too young to be in any way depended upon for size, colour or markings; but I have notwithstanding been induced to describe it, from the strong specific character furnished by the eyes alone; and this character would not be affected by age. The great relative disproportion in the size of the eyes, and their situation on the perpendicular facial space, will at once distinguish it from all its congeners. It was met with by myself at Bloxworth, Dorset, in 1861.

CÆLOTES MÆRENS.

Female, immature. Length 1-fifteenth of an inch. Length of cephalothorax 1-thirtieth.

Cephalothorax broad and squarish in front, rather sloping from the hinder part of the ocular region to the forehead, and very abruptly sloping behind the abdomen. On this hind slope is a broad shallow longitudinal indentation. Colour pale yellowish brown, with a green tinge, suffused with blackish at the eyes. About the centre of the cephalothorax is an irregular spade-shaped patch, of a dull sooty colour, from which several lines run from the front to the eyes, and from the sides obliquely forwards. Margins black, and from them several broadish stripes of dull sooty brown converge towards the hinder part of the central patch, and narrow to a point as they approach it.

Eyes in two rows, just above the insertion of the falces; the front row shortest, and nearly straight; the hinder one curved slightly

from it. The outer eyes of the front row are very slightly the largest of the eight, the outer ones of the hind row next, and the centre ones of the front row the smallest. The distance between the two centre ones of the hind row is slightly greater than that between each and the end one on its side. The central eyes of the front row are close together, but do not touch; and each touches the end eye nearest to it.

Legs strong, moderate in length, clothed with hairs and a few spines. Rather paler in colour than the cephalothorax. The tibial, tarsal and metatarsal joints (except at the articulations) suffused with blackish.

Falces short, strong, and of a pale dull greenish colour.

Palpi similar to the legs in colour. Radial and digital joints long, and slightly suffused with blackish.

Maxillæ moderately long, strong and convex, enlarged at the top, where they are rounded on the *inner* and obliquely truncated on the *outer* sides. They are strongly inclined to the labium, and are of a dull greenish hue.

Labium broad at the base, from which it narrows into a triangular shape, with the point blunted. Colour blackish brown.

Sternum: line of junction with the labium, hollowed out. It is heart-shaped and very convex, hairy, and of a greenish colour, thickly mottled and suffused with dull blackish.

Abdomen short-oval, thickly clothed with hairs, among which are many long palish ones. It projects considerably over the base of the cephalothorax. Colour black, freckled with minute pale points. Upper side with a whitish spot on each side of the medial line, at about half its length towards the spinners; to these succeed, on each side, an oblong, slightly oblique, pale whitish patch, followed by two others rather more oblique, forming chevrons interrupted at the centre; these are followed by one or two short, but rather curved transverse lines of the same colour.

Spinners dull greenish in colour. Inferior pair much stouter and longer than the rest. Plates of the spiracles greenish, suffused, especially towards the upper ends, with dull black.

I met with the specimen above described on low plants in a wood at Bloxworth, in May, 1862. It is evidently a very young specimen. Its characters are, however, sufficiently marked to enable me to describe it as distinct from any known species; and it appears to belong

to the genus *Cælotes*, of which only one species has been before described.

Family THERIDIIDÆ.

THERIDION SPIRAFER.

Male, adult. Length 1-ninth of an inch. Length of cephalothorax 1-nineteenth. Relative length of legs, 1, 2, 4, 3.

Cephalothorax but slightly raised in front. A deep oblique indentation behind each lateral pair of eyes, and one in the medial line of the hinder part. Very sparingly furnished with hairs. Colour dull yellow, of an amber tint. Margins dull blackish brown. A broad central band of red-brown includes the eyes, and narrows gradually to the hind margin.

Eyes on tubercles. The two centre ones form a square, if anything a trifle wider in front than behind. The eyes of the side pairs almost touch each other, and are placed slightly obliquely.

Legs of the same colour as the cephalothorax, and hairy. The first pair is much the longest; they are blotched with dark reddish brown at the joints, and the upper halves of the tibial joints of the males are suffused with red-brown.

Abdomen oval, very convex above, thickly clothed with hairs, and projecting considerably over the base of the cephalothorax. Its pattern on the upper side consists of three longitudinal bands; the centre one narrows towards the spinners, and is of a dark black-brown, strongly dentated on the edges, which are bounded by a clear broad line; this line dilates over the fore part of the abdomen, and is often tinged with green and red: the central band may be described as consisting of a series of blunt-ended, black-brown, diamond-shaped patches, of which that nearest the cephalothorax is far the largest, and has its hinder part much shorter than the fore part. The band on each side of the central one is of a yellow-brown colour, with a warm reddish tinge, obscurely mottled with whitish yellow and brown points: these bands are irregularly dentated on their lower sides, and also edged with a bright yellow line. The sides of the abdomen are yellowish brown, with numerous zigzag perpendicular lines of deep black-brown, in some specimens having merely the appearance of being mottled with that colour. A broad longitudinal band of dark brown, edged with bright yellow, occupies the under side.

Maxillæ, labium and falces like the cephalothorax in colour; the

latter mottled at their base and outer sides with blackish, suffused with brown. Sternum the same, broadly edged with black-brown and thinly freckled with black points.

Palpi short, hairy, and similar in colour to the legs. Cubital joint shorter than the radial, and furnished with several long bristly hairs. The radial joint is produced, on its outer side forwards, into a strong abruptly-pointed projection, overlapping the side of the digital joint, which is roundish-oval, prolonged at the end into a kind of snout. The convex sides of the digital joints are turned underneath and slightly towards each other, thus turning the palpal organs upwards and slightly outwards. These organs are not complicated, nor very highly developed: they consist chiefly of a circular lobe, of a dull reddish yellow colour, palest in the centre. This lobe is arched over by a fringe of long, bristly, black hairs, springing from the outer edge of the produced part of the radial joint, which has a deep red-brown horny margin. This fringe is met by another of less conspicuous hairs, issuing from the opposite and black margin of the digital joint. The outer edge of the palpal organs is encircled by the coils of two very long dark red-brown filiform spines, one of which issues from the inner side of the circular lobe, and the other from near the inner side of the radial joint: these spines have the appearance, in some specimens, of being but *one* of a larger size, but with a little care they may be separated, and seen to consist of two smaller ones: the length of these spines, when uncoiled, is upwards of 1-fourth of an inch. The female is rather larger than the male, but resembles it in colour and markings.

An adult male and immature females of this species were captured on furze-bushes at Hursley, near Winchester, in May, 1860, but were overlooked among specimens of *T. pulchellum*, to which it is allied, until I met with it again in tolerable abundance at Bloxworth, in June, 1862. It differs very remarkably from *T. pulchellum* in the form of the palpi, and structure of the palpal organs (especially the long, fine, coiled spines connected with them), although resembling it somewhat in the markings of the cephalothorax and abdomen; it is, though, less vivid in its colours than that species. It spins an irregular web among the shoots and blossoms of the common furze.

THERIDION CONGENER.

Female, adult. Length 1-ninth of an inch. Length of cephalothorax 1-twentieth. Relative length of legs, 1, 4, 2, 3.

Cephalothorax small; ocular region elevated, prominent, and compressed on the sides forwards. Colour deep shining black-brown. The space between the eyes and frontal margin (*i. e.*, the insertion of the falces), is of considerable extent, and slopes much forwards.

Eyes in two curved rows, forming almost an oval at the extremity of the prominence. The centre ones of the hinder row are closer to each other than each is to the end one on its side. Those of the side pairs are contiguous, and obliquely seated on a strong tubercle. The two centre eyes of the front row are the widest apart and the largest of the eight: these last two are black; the rest are pearly white.

Legs short, stout, sparingly clothed with hairs and a few fine spines. Colour pale yellow, blotched and annulated with deep shaded black and yellow-brown, giving much the appearance of tortoise-shell.

Maxillæ rather dilated at the base, longish and almost meeting over the labium, which is pointed: these parts are of a dark brown colour.

Falces short, strong, and of a deep blackish brown colour.

Sternum heart-shaped, broad, very convex, and of a deeper colour than the cephalothorax.

Palpi of moderate length, coloured and annulated like the legs.

Abdomen large, very like some of the Epëiridæ in its form, *i. e.*, much broader in front than at the spinners. Upper side yellowish, thickly mottled and suffused with yellow-brown, and with numerous black dots and points, forming five or six obscurely defined, yellowish, transverse, angulated stripes, the angles directed forwards; the stripes running quite to the lower margins, where they melt into the clearer yellow of the sides. These stripes contain the principal black spots and points, which are largest, and appear as if run together, at the angle of each stripe. The sides towards the front are black, edged broadly underneath with yellow; and the part projecting over the cephalothorax is also black, as is the whole of the under side and the part surrounding the spinners. About one-third of the distance between the spinners and the plates of the

spiracles are two transverse, oblong, rather curved, yellow spots, one on each side of the medial line. Sexual organs well-developed, and of a deep red-brown colour.

This spider, which is remarkable from the form of the abdomen and its short stout legs, is evidently allied to, though very distinct from, *T. denticulatum*. The specimen from which the above description has been made was captured by myself, in July, 1858, at Lyndhurst, Hants. I have left it undescribed hitherto, in hopes of finding the male.

Family LINYPHIIDÆ.

LINYPHIA ALBICINCTA.

Male, immature. Length 1-eighth of an inch. Length of cephalothorax 1-sixteenth. Relative length of legs, 1, 4, 2, 3.

Cephalothorax narrow in proportion to its length, but broad and square at the eyes. It is very glossy and shining. Colour dull yellow, slightly suffused with brown, especially towards the margins and hinder part. Margins indistinct brownish red.

Eyes dark-coloured, and on very distinct black spots. The centre ones of the hinder row are considerably the largest of the eight. The side pairs are seated obliquely on a tubercle, and are about equal in size, and the smallest of the eight.

Legs moderate in length and strength, pale dull yellow in colour, and furnished very sparingly with hairs and a few longish black spines.

Maxillæ stout, convex and straight, slightly rounded at their extremity on the outer side, obliquely truncated and excavated on their inner corners, where their colour is a deep red-brown, the rest being a little darker coloured than the cephalothorax.

Labium short, broad at the base, narrower at the top, where it is rounded off. Colour dark red-brown.

Falces very strong, convex and straight, slightly cut away on the inner sides at their extremity, where they are furnished with strong dark red-brown teeth. Colour similar to that of the cephalothorax.

Sternum heart-shaped, and of a deep red-brown colour.

Palpi short, like the legs in colour. Radial joint longer and stronger than the cubital. Digital joint very large; but as these parts

required the last moult to complete their development, the structure of the palpal organs could not be discerned.

Abdomen oblong-oval, very convex above throughout, and glossy. Upper side dull yellow-brown, tinged with red. Under side dark red-brown. These portions are separated from each other by a narrow horizontal band of white, which runs completely round the abdomen, though commonly interrupted just above the spinners. On the upper side two longitudinal rows of red-brown blotches or spots are visible in most specimens, and between these rows many specimens have a narrow tapering longitudinal band of the same colour: these spots vary much in appearance and size, and in some specimens they run together, and form a kind of broad, dentated, red-brown band, occupying nearly the whole of the upper side of the abdomen: in most specimens the blotches nearest the spinners run together into an irregular patch. The white band, too, presents considerable variety in different specimens, in some being only a white line, in others much broader, but interrupted. Some specimens have the sides and spaces between the rows of red-brown spots more or less suffused or mottled with white; in some the red-brown spots are more or less nearly obsolete. The female resembles the male, but is rather larger.

I captured specimens of this species at Hursley, near Winchester, in August, 1861, and have since found it numerous at Bloxworth, Dorset. It spins an irregular web among the leaves and stems of low-growing plants in woods. I have not yet met with it quite adult; most of those met with having another moult to undergo before becoming so.

This species may readily be distinguished from any other known *native* species by its *reddish yellow hue*, as well as by the white band which separates the upper and under sides of the abdomen. It is evidently allied to, but I think quite distinct from, the *Linyphia cincta* of Walckenaër. In the general character of its markings it bears some resemblance to females of *L. fuliginea*, but its colours differ totally.

LINYPHIA SETOSA.

Male, adult. Length 1-tenth of an inch. Length of cephalothorax 1-twentieth. Relative length of legs, 1, 2, 4, 3.

Cephalothorax broad, raised and prominent at the eyes, and with a longitudinal indentation on the hinder part. Colour brownish

yellow, rather clouded with brown towards the margin. Space occupied by the eyes black, and from and behind this space issues a thinnish tuft of strong bristly hairs, curving forwards and downwards.

Eyes set about the prominence on the fore part of the cephalothorax, on geminated black spots, in two rows curved slightly away from each other. The eyes of the side pairs are very near together, but do not touch each other. The centre ones of the hinder row are wide apart, and those of the front row are almost contiguous. The end ones of the front row are the largest of the eight, the other six being nearly uniform in size.

Legs long, rather slender, of a brownish yellow colour, slightly tinged with greenish, furnished with longitudinal rows of brown hairs, and a few fine spines of a darker colour. An erect spine issues from each of the genual joints. Their relative length is 1; 2, 4, 3, the third pair being considerably the shortest.

Palpi short and slender. The cubital and radial joints about equal in length; the latter is much the stronger, protuberant at its extremity, and has a tuft of strongish hairs on its upper side, but no marked projections. Cubital joint furnished with a long bristly hair, issuing forwards from the upper side of its lower extremity. Digital joint hairy; it has a prominent lobe on the outer side, and a strong, dark red-brown, corneous projection, issuing from its base near the radial joint on the outer side, and curving across it to the inner side. Underneath this projection the base of the digital joint has a curved conical prominence, pointed in the same direction. The palpal organs are highly developed, prominent and complicated, consisting of lobes and irregular processes, of a red-brown colour; two prominent, black, curved spines, parallel but not close together, enveloped in membrane, issue from underneath the outer side towards their extremity, and curve under towards the inner side.

Falces moderately long and strong; divergent at their extremities.

Maxillæ long, strong and straight, and, with the labium, which is short and semicircular, of a yellowish colour clouded with brown.

Sternum of a black-brown colour, clothed with longish hairs.

Abdomen oval, not very convex on the upper side, thinly clothed with hairs. Upper side straw-yellow. A large irregular patch of black-brown occupies the forward half, and is succeeded by several transverse angulated bars of the same colour (the angles

directed forwards), but of different widths. Sides, part just above the spinners, and under side black-brown, the latter part the darkest coloured.

An adult female differed from the male in having the cephalothorax dark brown, and in the patch and bars on the abdomen being of greater extent and all run together, leaving an interrupted band of yellow on either side, and two or three obscure spots of the same colour below each band on the lower margin of the abdomen. The specimens above described were captured by myself on Bloxworth Heath, in May, 1862. It is a striking-looking species, and the horn-like projection at the base of the digital joint, together with the two curved spines enveloped in membrane connected with the extremity of the palpal organs, will serve to distinguish it at once from others of the genus *Linyphia*.

LINYPHIA PULLATA.

Male, adult. Length 1-tenth of an inch. Length of cephalothorax 1-twenty-first. Relative length of legs, 1, 4, 2, 3.

Cephalothorax rather shorter than the abdomen. A strong oblique indentation on the sides just behind the ocular region, and a broad shallow one towards the hinder part. Colour brownish yellow, suffused on the sides and margins with sooty black; some specimens have but little of this suffusion; others are entirely of a sooty black on the cephalothorax.

Eyes in two rows, on front of cephalothorax. The front row is the shortest and nearly straight, and the hinder row is curved away from it. They are nearly equal in size; the two centre ones of the hinder row slightly the largest, and those of the front row slightly the smallest of the eight: these last are close together, but do not touch each other. The eyes of the hinder row are about equidistant from each other.

Legs long and rather slender. The first, fourth and second pairs do not differ much in length. They are of a yellow colour, thinly clothed with hairs and a few longish fine spines on the upper sides of the femoral and tibial joints.

Palpi short, like the legs in colour. Radial joint larger and stronger than the cubital: these joints are furnished with several longish, curved, black, bristly hairs, directed forwards. Digital joint large and slightly protuberant on the outer side; it is darker in colour than the rest of the palpus, and hairy. Palpal organs well-developed and prominent, but not very complicated. One

strong, straight, corneous process, of a reddish colour, runs along the inner side, and ends near their extremity in a blunt point. Two other processes, edged with black, occupy the centre, and end near the extremity in curved or hooked points; and there is a shorter curved process on the outer side of the palpal organs near their base.

Falces long and moderately strong, rather sharply and abruptly divergent towards their extremity. Similar in colour to the cephalothorax.

Maxillæ long, strong, and curved towards the labium, which is short and rather pointed at the top.

Sternum broad, convex and hairy. These parts are of a yellowish colour, more or less suffused with sooty black.

Abdomen not so convex above as many others of this genus. Underneath and on the sides it is of a blackish brown colour. Upper part towards the cephalothorax pale dull yellowish brown, divided by a more or less distinct blackish longitudinal streak, from which on either side issue two or more oblique lines, each of which sometimes ends in a largish spot: these lines form two chevrons, with the vertices directed forwards: to these succeeds a longitudinal dentated band of the same colour, narrowing to a point just above the spinners, and bordered with black; the black border joining in with the black-brown of the sides and under part. This pattern is more or less distinctly visible in all the specimens I have seen: in some the whole abdomen is suffused with sooty black, and thus the pattern is almost obliterated. The female differs from the male only in having the abdomen somewhat more convex above. The sexual organs are not very prominent, but they have connected with them a longish nearly straight process (or ovipositor?), of a yellowish colour tipped with red-brown: this process is directed backwards, and applies closely to the surface of the abdomen.

Adults of both sexes of this spider were captured by myself on iron railings at Bloxworth, in May, 1862. It is very closely allied to *L. pulla*, which it much resembles in general colour and appearance; it is, however, smaller, and differs in the pattern on the abdomen, and specially in the structure of the palpal organs; these want the spine curved in a circular form at their extremity, enclosing another spine within its coil, which is characteristic of *L. pulla*: these organs also

differ in other points of their structure. The female also differs from that of *L. pulla* by the ovipositor (?) being longer and stronger.

NERIENE INNOTABILIS.

Male, adult. Length 1-twelfth of an inch. Length of cephalothorax 1-twenty-sixth. Relative length of legs, 4, 1, 2, 3.

Cephalothorax shortish-oval, much compressed at the eyes, where it is slightly prominent. The hinder part has a shallow indentation in the medial line. Colour dull yellowish brown, with a green tinge. Margins bounded by a sooty brown line, and some obscure lines of the same colour converge to a point in the centre.

Eyes on black spots, in two rows of equal length, curved away from each other, the hinder row most curved. Nearly equal in size, except the two centre ones of the front row, which are much the smallest, and are nearly contiguous. The two centre ones of the hinder row are further from each other than each is from the end one on its own side. The eyes of the side pairs are close together, but not contiguous.

Legs moderately long and stout, rather paler and clearer coloured than the cephalothorax, almost equal in length, the third pair rather the shortest, and the fourth pair slightly the longest. They are furnished with brownish hairs, and a few short slender spines.

Maxillæ short, strong, dilated at the base, and much inclined towards the labium, which is broad, and semicircular at the top.

These [parts, together with the falces, which are of moderate length and not very powerful, are of the same colour as the legs.

Sternum moderately convex, hairy and of a sooty brown colour.

Abdomen largish, oval, moderately convex above, and projects over the base of the cephalothorax. It is of a dull greenish yellow-brown, suffused and mottled with sooty brown.

Palpi short, moderately stout. Radial joint rather longer and stouter than the cubital: the former is rather produced in front on the inner side, ending in an obtuse point. Cubital joint has several black spiny hairs in front on the upper side. Digital joint large, obtusely conical on the upper side, the point of the cone rather directed outwards; it has also an angular enlargement near the base on the outer side. Palpal organs highly developed, prominent and complicated, of a pale colour, with red-

dish edges and marks on their lobes and processes. At their extremity are several fine, short, curved and other black spines.

An adult male of this spider was captured by myself among the rugged bark of Scotch firs, at Hursley, near Winchester, in May, 1862. A close and critical examination of the palpi of this species will be necessary to distinguish it from others nearly allied, and equally obscure-looking in their general characters.

NERIENE CONIGERA.

Male, adult. Length 1-fifteenth of an inch. Length of cephalothorax 1-thirty-third. Relative length of legs, 4, 1, 2, 3.

Cephalothorax short, rather pointed at the eyes, where it is but slightly compressed on the sides. It has a very slight longitudinal indentation in the medial line of the hinder part. A very slight transverse dip behind the ocular region. Colour pale brown, with a greenish tinge. Margins bounded by a sooty brown line.

Eyes in two rows slightly curved from each other, nearly equal in size; the centre ones of the hinder row rather the largest, and those of the front row rather the smallest of the eight. The centre ones of the hinder row are rather further apart than each is from the end one on either side. The eyes of the front row are about equidistant from each other; those of the side pairs close together, but do not touch.

Legs moderate, and not greatly different, in length. The fourth pair are very slightly longer than the first, and the third pair shortest. Colour pale whitish, tinged with greenish yellow. They are sparingly clothed with longitudinal rows of blackish hairs, and a very few short, fine, nearly erect, black spines.

Falces longish, but not very powerful, slightly paler in colour than the cephalothorax.

Maxillæ strong, dilated at the base, slightly inclined towards the labium, and obliquely truncated on the outer side. Similar in colour to the falces, but paler at the top, and clothed on the inner margins with sooty black hairs.

Labium very short, semicircular, slightly dilated at the top. Colour greenish, mottled with sooty specks.

Sternum broad and very convex, square at the labium, to which it is similar in colour.

Abdomen pale murky greenish yellow, thickly mottled and obscured with light sooty brown; thinly clothed with fine blackish hairs; very convex above, and of a short-oval form.

Palpi moderately stout, not very long, similar in colour to the legs. Humeral joint slightly curved inwards. Cubital joint very short, and with a slight sharpish prominence in front, furnished with two or three short black bristly hairs. Radial joint about equal in length to the cubital, but rather stronger, and with a slight projection on the inner side over the base of the digital joint, which is rather darker colour than the rest and of a largish size, furnished with blackish hairs: this joint has, on the upper side near its base, a large conical prominence, the point of which is slightly directed backwards and outwards: this prominence is convex on the inner and slightly concave on the outer side. Palpal organs prominent, highly developed and complicated: connected with them, at the base underneath, is a dark-coloured, flattish, reep-hook shaped, corneous process. These organs project far outside and beyond the margins of the digital joint, and consist of lobes and corneous processes, with one or two short black spines at their extremity: they are of a pale colour, edged with reddish.

Two adult males of this spider were captured by myself on furze-bushes at Bloxworth, in April, 1862. The most striking and leading characteristic of the species seems to be the conical prominence on the base of the digital joint of the palpi.

NERIENE SUBTILIS.

Male, adult. Length 1-twelfth of an inch. Length of cephalothorax 1-twenty-sixth. Relative length of legs, 4, 1—2, 3. In the general form and structure of the palpi this species bears considerable resemblance to *Neriene conigera* (last described), but it differs in being larger, of a more elongated form, and of a totally different colour.

Cephalothorax yellowish brown tinged with red, and suffused with brown near the eyes.

Legs brightish red-brown, paler at the articulations of the joints.

Fourth pair perceptibly longer than the first, which scarcely differ in length from the second pair.

Sternum similar to the legs in colour.

Abdomen long-oval, of a deep brown-black above, and reddish

brown underneath, with a pale oblique line forwards, just above the plates of the spiracles, and a longitudinal pale line on each side, meeting at the spinners, which are of a pale drab colour.

Palpi short, not very strong. The cubital joint has a strong black bristly hair on its upper side. Radial joint produced into a sharp projection in front on the inner side. Digital joints large; their convex sides turned towards each other. Near the middle of the digital joint on the upper side there is a strong conical prominence, flattened on the outer side; but this prominence is not proportionally so large, nor is its apex directed backwards, as in *N. conigera*; neither is its outer side so concave, and it does not spring from so near the base of the joint. Palpal organs very prominent and complicated; their colour is yellowish red, edged and marked with red-brown.

I captured an adult male of this species among heath-stems and roots, at Bloxworth, in June, 1862.

NERIENE ANOMALA.

Female, adult. Length 1-eleventh of an inch. Length of cephalothorax 1-twenty-fourth. Relative length of legs, 4, 1—2, 3.

Cephalothorax small, oval, compressed forwards. Colour dull yellow-brown, with some sooty lines springing from the margins (which are similarly bounded), and meeting in a point near the centre. A little way behind the eyes there is a figure of a triangle with the angles cut off, and divided down the centre, formed by similar sooty brown lines. A short transverse indentation occupies each side of the medial line, and there is a longitudinal one in the medial line of the hinder part.

Eyes in two rows of equal curvature, the curves directed from each other; the hinder row is slightly the longest. The eyes of both rows are nearly equal in size; the centre ones of the front row slightly the smallest, and near together, but not touching each other. The centre ones of the hinder row are rather further apart from each other than each is from the end one on its side. The eyes of each of the side pairs are placed very slightly obliquely, and are contiguous.

Legs bright yellow-brown, tinged with reddish, pale at the articulations of the joints. Fourth pair decidedly longer than the first, which are little if any longer than the second, and the

third pair slightly shortest. They are moderately long and stout, and are furnished with rows of darkish hairs, and a few fine short spines.

Falces short, strong. The frontal margin projects rather over their base. Colour murky yellow-brown.

Maxillæ large, stout, inclined towards the labium, much dilated at their base, and obliquely truncated on their outer sides. Like the falces in colour, but rather paler on the inner margins.

Labium broad, short, squarish at the top. Colour yellow-brown, mottled with sooty brown; the top rather paler.

Sternum rather convex, scalloped on the margins. Similar in colour to the labium. Margins sooty brown.

Palpi short, same colour as the legs. Radial joint longer and stouter than the cubital. Digital joint hairy, large, long-oval and pointed at the end, tumid and protuberant at the base, like the undeveloped palpus of male spiders. The radial and cubital joints have two or three black bristly hairs on their upper sides.

Abdomen large, long-oval, moderately convex above, slightly glossy and of a sooty brown-black colour, thinly clothed with short pale hairs. When in spirits of wine a tolerably well-defined pattern may be traced, consisting of a longish, fusiform, longitudinal band, formed by two pale lines ending in a point at about half the length of the abdomen. From the sides of this band several fine pale lines run at a sharp angle to the side margins; and following the band are several sharply-curved lines, which span the hinder half of the abdomen towards the spinners. Under side paler than the upper, and sometimes with a strong yellowish tinge. It has an oblique pale line on each side forwards, and two longitudinal ones meeting at the spinners. All these lines are scarcely perceptible, except when in spirits of wine. The sexual organs are very large and prominent: at their extremity there is a reddish process, curving inwards and over their orifice.

Several specimens of this very remarkable spider were captured by myself among heath at Bloxworth, in the spring of 1862. It may at once be distinguished from every other known spider by its combining the characters of both the male and female sex, having the large tumid digital joint of the immature male palpus and the highly-developed female sexual organs at the base of the abdomen.

NERIENE BIFIDA.

Male, adult. Length 1-ninth of an inch. Length of cephalothorax 1-seventeenth. Relative length of legs, 1—4, 2, 3.

Cephalothorax depressed and indented in the medial line of the hinder part. Ocular region considerably and abruptly elevated, the upper part of the elevation being divided longitudinally into two segments by a deep cleft or notch. Colour yellowish red.

Eyes on deep black spots, four being placed nearly in a square on each of the segments of the frontal eminence. The outer eye of the front of each square is the largest, and the inner one the smallest of the eight. The eyes of the inner sides of the squares are further apart than those of the outer sides, which are very near together, but not quite contiguous.

Legs moderately long, and furnished with hairs, but no spines. The first pair is, if anything, rather longer than the fourth. Their colour is clear bright yellow. The femoral joints of the first pair are disproportionately stout and bent forwards at the extremities; the tibial joints of the same pair are also stout, and enlarged underneath towards their extremities, which are bent in a direction contrary to the bend in the femoral joints. The short joint connecting the tibial and femoral joints is stout and enlarged at its front extremity. The hairs on the enlargement of the tibial joints are long and fine.

Falces strong, straight, rather enlarged at their base, and like the cephalothorax in colour.

Maxillæ greatly dilated at their base, strongly inclined towards the labium, and similar in colour to the falces.

Labium and sternum darker coloured than the cephalothorax.

Palpi long and stout, remarkable in the form of the different joints. The humeral joint is very strong, and gradually enlarges from its base to its upper end, where, on its upper side rather towards the inner margin, it has a strong spur slightly directed backwards, and near this spur are a number of short, strong, sharp-pointed, black spines. The cubital joint is short and gouty. The radial joint has a long projection on its inner side, curving obliquely outwards over the digital joint, to the surface of which it closely applies, reaching almost to its extremity: this projection issues from the extremity of the joint. Above it, and issuing from the base of the joint, is a second strong projection, pointed at its extremity, but scarcely half the length of

the former one. On the outer side of the joint, also issuing from its base, is a third projection, shorter and stouter than the last, and rather more obtuse at its extremity. These two last projections are strongly edged with black. Digital joint oval, with a large lobe on the outer side. Palpal organs well-developed and rather complicated: at their extremity is a fine, black, filiform, coiled spine, in contact with which is a mass of semitransparent membranous substance.

Abdomen short, oval and convex, thinly clothed with hairs, glossy and of a yellowish red-brown colour.

This spider was captured by myself among low herbage at Bloxworth, in the summer of 1861, and was at first mistaken for *Neriene rubens*, to which it bears close resemblance, both in general form and appearance, and also in the form of the palpi. It may, however, be immediately distinguished from that species by the ocular eminence being divided into two segments by the longitudinal cleft above described, and which gives its eyes a totally different relative position from that of *N. rubens*.

NERIENE BICUSPIS.

Male, adult. Length 1-twenty-first of an inch. Length of cephalothorax 1-forty-second. Breadth 1-forty-first. Relative length of legs, 4—1, 2, 3.

Cephalothorax broad and flat, almost circular in shape, with the front part squared off. Towards each frontal corner is a moderately high tubercular eminence, surmounted by a short, strong, black cusp or spine, slightly curved, and its point directed inwards and forwards. Colour pale dull semitransparent greenish. Margins black, and a black line runs longitudinally through the centre, and several sooty lines converge towards a central point in the medial line.

Eyes in four pairs, nearly equal in size; one pair (the eyes of which are widest apart) between the tubercular eminences; the eyes of another pair, seated on a large black spot below each eminence near the frontal margin, are near together but not contiguous; the lateral pairs are seated very obliquely at the bases of the eminences in front.

Legs moderately long and strong, furnished with hairs. Colour pale semitransparent yellow-brown, the central part of each joint being strongly tinged with reddish orange-brown.

Falces strong and straight, and of a dull yellowish colour.

Maxillæ like the falces in colour; long, strong, obliquely truncated at the top on the outer side, and slightly inclined towards the labium, which is broad, short, semicircular, and of a sooty brown colour.

Palpi rather long, moderately stout, similar to the falces and maxillæ in colour. Cubital joint double the length and stoutness of the radial: the latter joint has the upper extremity produced into a longish tapering kind of spur; this projection is nearly straight, and has a dark-coloured pointed tip; it is directed slightly outwards, over the basal half of the digital joint, but does not lie flat upon it as in many other species. Digital joint of moderate size and hairy. Palpal organs highly developed and prominent, but not very complicated. A long, strong, black spine, enveloped in transparent membrane, issues from their outer side, and, curving rather forwards and downwards, forms a large loose coil on their outer and under side: the end of this spine is very fine and filiform, and projects among a mass of semitransparent membrane on the outside, near about the middle of the length of the digital joint.

Abdomen moderately convex above, glossy, and projecting over the base of the cephalothorax. Colour dark sooty brown, with a greenish tinge. It is sparingly clothed with dark hairs.

The female differs from the male in being rather larger, and in wanting the tubercular elevations and cusps on the frontal corners of the cephalothorax. I met with this very remarkable, though minute, spider in tolerable abundance on iron railings at Bloxworth, in April and May, 1862. It was commonly to be found in an inverted position, in an irregular web spun in the angles of the posts and upper rails. It may at once be distinguished from others of its genus by the broad, flat and almost circular cephalothorax, as well as by the two frontal eminences, which give it a very striking appearance. Mr. Blackwall tells me that it is allied to *Theridion sulcifrons*, *Wider*, a species I have never yet seen. Except for Mr. Blackwall's opinion to the contrary, I should have unhesitatingly included it in the genus *Walckenaera*, to which it appears to be as nearly allied as to the genus *Neriene*.

WALCKENAERA TRIFRONS.

Male, adult. Length 1-eleventh of an inch. Length of cephalothorax 1-twenty-fourth. Relative length of legs, 4, 1, 2, 3.

Cephalothorax broad, obtuse, prominent, obliquely and abruptly truncated in front, thus giving the appearance of two frontal margins, a little way behind the upper one of which is a strong, abrupt, perpendicular eminence, hood-shaped, *i. e.*, convex behind and sloping forwards, but flattish in front when looked at in profile: when looked at in front, or full-face, the summit of the eminence is circular, much broader than at the base, and divided longitudinally into two segments. There is a deepish transverse indentation behind each side pair of eyes, one at the base of the eminence, and a longitudinal one in the medial line of the hinder part. Colour dark black-brown and shining.

Eyes in four pairs; one pair on the top of the eminence towards its frontal margin, and three pairs in a straight line, just below the upper frontal margin of the cephalothorax. The eyes of the side pairs are slightly obliquely placed, and those of the central pair are close together and the smallest of the eight: the other six do not differ much in size. Between the eyes at the top of the eminence there are some strong black bristly hairs, directed forwards, and meeting others which spring from the middle frontal margin.

Legs of moderate length and strength. Fourth pair slightly the longest; first and second pairs nearly equal, and the third pair shortest. Their colour is a bright yellow, tinged with orange.

Falces long, strong and very convex. In colour rather paler than the cephalothorax.

Maxillæ similar in colour to the falces, moderately long and strong, and much inclined towards the labium, which is broad, short and semicircular.

Sternum very convex, black and shining.

Palpi of moderate length, and similar in colour to the legs. Humeral joint curved inwards. Cubital joint much longer than the radial, and slightly clavate. Radial joint short, and with two projections—one, on the outer side, is broad, obtuse and concave, with a red-brown corneous process issuing from its concavity; the other, on the inner side rather towards the front, is slighter, but longer, than that on the outer side, and is bifid at its extremity. Digital joint large, broad at its base, gradually lessening to the extremity, and is suffused with brownish black. Palpal organs not very prominent nor complicated; they consist of

two principal lobes: towards their extremity there are two spines—one, long, strong, corneous and black, issues from their extremity on the under side, curves round their extremity, and so on round the outer margin of the digital joint, across their base, and projects outwards in a long filiform point; the other spine is short and stout, and springs from within the coil formed by the other spine, within which it lies, curved round in an opposite direction.

Abdomen jet-black, sparingly clothed with very short hairs, ovi-form, very convex above, and projecting over the base of the cephalothorax. The plates of the spiracles have a greenish hue.

An adult female, captured with the male, differed in being generally lighter coloured, the cephalothorax being less prominent and obtuse, and without the eminence, characteristic of the *male* spiders only, of this genus.

This very distinct species was captured by myself on iron railings at Bloxworth, in May, 1862. The shape and position of the cephalothorax and its frontal eminence (forming, in fact, three frontal margins) are very characteristic, as also are the radial and digital joints of the palpi, and the spines connected with the palpal organs.

WALCKENAERA AFFINITATA.

Male, adult. Length 1-fifteenth of an inch. Length of cephalothorax 1-thirtieth. Relative length of legs, 4, 1, 2, 3.

Cephalothorax dark brown, much elevated and rather prominent, broad and obtuse in the ocular region, which is truncated in a sharply sloping direction from the top forwards, and thence downwards, with a slight inward curve, to the frontal margin: the slope of the hinder part of the ocular region is in a rather convexly curved line, and joins almost in the same line as the slope of the hinder part of the cephalothorax.

Eyes in four pairs, on the summit and front slope of the ocular region. Those of the two side pairs are contiguous and equal in size, and the smallest of the eight. Those of the front pair are slightly below the straight line of the foremost eyes of the side pairs, and are near together, but not contiguous; around them are some short bristly hairs. The eyes of the hinder pair are the same distance from each other as each is from the hinder one of the side pair on its side.

Legs moderately long and stout, clothed with hairs, and of a pale yellowish brown colour, blackish at the articulations of the joints.

Falces short, powerful, and of a yellow-brown colour.

Maxillæ short, inclined towards the labium, and similar to the legs in colour.

Labium broad, short, semicircular, and, with the sternum, which is broad and convex, of a black-brown colour.

Abdomen short-oval, very convex, and much projecting over the base of the cephalothorax. Its colour is a deep black-brown, with a few obscure, pale, curved, transverse lines on the upper side towards the spinners: these lines are only visible when in spirits of wine.

Palpi moderately long, same colour as the legs, except the digital joint, which is darker. Humeral joint curved inwards. Cubital joint long, rather bent downwards and clavate, notched at the end on the outer side. Radial joint short and stout, produced in front into a long strong projection, curving towards the outer side, reaching nearly to the end of the digital joint: the end of this projection is dilated, and in the form of a crescent, whose outer limb is broad, obtuse and dark-coloured; the tip of the lower limb is small, pointed and curved. Palpal organs highly developed, but not very prominent nor complicated: a large lobe at their base has its margin next to the radial joint, shining and corneous: from their extremity issue several spines; the most conspicuous is a very strong corneous one, of a dark reddish brown colour, issuing from their extremity on the inner side, and, curving across to and round their extremity, passes round their outer side, and projects its sharp point into some semitransparent membrane; another smaller, slightly curved, black spine, issues from within the curvature of the former one, and projects its point into the same membrane.

An adult female only differed in the less elevation of the ocular region.

I captured this species at Bloxworth, in May, 1861, and for some time mistook it for *W. humilis*, to which it is nearly allied, but from which, however, subsequent examination has shown it to differ considerably, especially in the form of the ocular region: this part, in *W. humilis*, is less elevated, less prominent, rises more abruptly, is more obtuse at its upper end, where it is truncated more in a

horizontal line. The eyes also of the side and hinder pairs differ in their relative size and position from the corresponding ones in the present species.

WALCKENAERA ALTIFRONS.

Male, adult. Length 1-fifteenth of an inch. Length of cephalothorax 1-thirty-second. Relative length of legs, 4—1, 2, 3.

Cephalothorax blackish brown, tinged with greenish. Ocular region much elevated; face of the elevation flattish, and nearly perpendicular at the upper part. The hinder part is convex, and arched into a kind of hood shape. On each side of the base of the upper part of this elevation is a strong horizontal indentation: the lower part of the elevation forms a kind of second segment, projecting slightly beyond the upper segment, and divided from it by a transverse groove; this lower segment joins imperceptibly into the rest of the cephalothorax. The face of the upper segment is thickly clothed with short bristly palish-coloured hairs, directed forwards and downwards; the frontal margin below the lower eyes is rather prominent.

Eyes in four pairs—one on the fore part of the summit of the upper segment, wide apart and the largest of the eight: another pair on the line of division from the lower segment; these are near together, but not contiguous: the eyes of the side pairs are very nearly equal in size; they are placed obliquely and are contiguous; they are also slightly below the line of the pair on the lower segment.

Legs moderate in length and strength, of a bright orange-yellow colour, sparingly clothed with fine hairs. There is but little difference in the length of the first, second and fourth pairs.

Maxillæ short, broad, convex, and much inclined towards the labium, and of a greenish brown colour.

Labium short, convex, semicircular, and of a black colour.

Falces short, strong. Colour greenish brown.

Sternum heart-shaped, very convex, and sparingly clothed with yellowish hairs.

Abdomen longer than the cephalothorax, very convex above. Colour black. Sparingly clothed with hairs.

Palpi moderately long, and of a yellowish colour. Cubital joint slightly clavate, and about double the length of the radial joint, which is stout, hairy, and produced in front into a projection,

which curves over the base of the digital joint towards the outer side, and ends in a fine red-brown point. A small, brownish, semitransparent process issues from the curvature, and projects outwards. Palpal organs complex and prominent, of a red-brown colour. Several black spines issue from them, one of which curves across the middle; another shorter and stouter, and sharply curved like a reap-hook, issues from their extremity. The female is rather larger, but resembles the male in all except the absence of the frontal elevation.

I met with adult males and females of this very distinct species on underwood at Lyndhurst, in the New Forest, in May, 1860. It is allied to *W. fastigata*, but in that species the division of the upper and lower segments of the frontal elevation is much more clearly and strongly marked; it differs much also from the present species both in colour and in the form of the palpi and palpal organs.

WALCKENAERA LATIFRONS.

Male, adult. Length 1-fourteenth of an inch. Length of cephalothorax 1-twenty-eighth. Relative length of legs, 1—4, 2, 3.

Cephalothorax deep blackish brown. Ocular region prominent and elevated, and divided into two segments by a deepish transverse groove; the front segment rather below, as also less large, bold and obtuse than, the hinder one, which is broad, obtusely rounded, and slightly enlarged laterally at the top: this segment has a deep horizontal indentation on each side at its base, behind each side pair of eyes. A few very short, strong, bristly, blackish, erect hairs are on the top of the hinder segment; and the summit of the front segment has a tuft of paler hairs stretching over the groove that divides it from the hinder one.

Eyes in four pairs—one pair on the fore part of the summit of the hinder segment; the eyes of this pair are wide apart, and the largest of the eight: the other three pairs are on the front segment; each pair wide apart from the other; one pair is on the black, obtusely-pointed and rather prominent summit of this segment; the eyes of this pair are smallest of the eight. The side pairs have each the front eye larger than the hinder one.

Legs not very long; stout and hairy, of a paler and brighter brown than the cephalothorax.

Falces, maxillæ and labium similar in colour to the legs, the labium being rather the darkest.

Sternum broad, convex, and of a black-brown colour.

Palpi not very long; similar to the legs in colour. Cubital joint slightly clavate, and longer than the radial joint, which is stout, and has a pointed blackish projection on the outer side, and is produced at its extremity in front into a long nearly straight projection, which stretches over the digital joint towards the inner side: from the under side of this projection there issues a conspicuous semitransparent point-process, directed downwards. Digital joint hairy, and darker-coloured than the rest. Palpal organs prominent and complicated, with several short, black, curved spines at their extremity; their colour is dark red-brown mixed with black.

Abdomen broadish and convex. Colour deep sooty black.

I captured an adult male of this species on a wall at Bloxworth, in May, 1862, and have since (in March, 1863) met with several, both males and females, among low-growing plants and moss in woods. The female differs from the male only in the absence of the ocular elevation, and in being slightly larger. Though allied to other species in the division of the ocular region into two segments by a transverse groove, it may easily be distinguished by the breadth, boldness and comparative lowness of the hinder segment.

WALCKENAERA MINIMA.

Male, adult. Length 1-twenty-second of an inch. Length of cephalothorax 1-forty-second. Relative length of legs, 1—4, 2, 3. Cephalothorax has the ocular region moderately elevated; this elevation rises from the cephalothorax rather abruptly behind; it is obtusely rounded at the back part of its summit, from which it is truncated by a long slope to the lower pairs of eyes, where there are some coarsish black hairs. Its colour is pale yellow-brown, tinged with green, and with a strong sooty-coloured line round the base of the ocular eminence. The cephalothorax, at the upper part of its hinder slope, is slightly raised above the part that comes between it and the ocular region.

Eyes in four pairs—one pair on the top of the ocular elevation, at the commencement of the slope; these are wide apart, and the largest of the eight: the lateral pairs are just below the termination of the slope on either side; the eyes of each of these pairs are contiguous, and placed slightly obliquely; the foremost eye, if anything, rather larger than the hinder one.

Legs stoutish, not very long. Their colour is a pale yellow-brown, slightly tinged with red; and they are clothed with short pale hairs. The first and fourth pairs differ but slightly in length; the second pair is a little shorter, and the third pair shortest.

Falces of moderate length and strength, and similar in colour to the cephalothorax.

Maxillæ broad at the base, inclined towards the labium, rather rounded at the tips, and obliquely truncated on the outer sides.

Similar in colour to the falces, but pale whitish at the tops.

Labium small, short, flatly curved at the top.

Sternum broad, very convex, squared off at the labium, and, with that part, of a greenish yellow colour, mottled and suffused with dark sooty brown.

Palpi similar to the cephalothorax in colour, not very long. Humeral joint bent inwards. Radial and cubital joints both short, the latter sharply bent in the middle; radial joint stoutest of the two, and produced, rather on the outer side in front, into a strong projection, which curves outwards over the basal half of the digital joint, and is bifid at its extremity: on the outer side of the extremity of the radial there is another projection, shorter than the former; it is rather obtuse at the end, and curves slightly in an opposite direction. Palpal organs not very complex, but highly developed and prominent. A strong corneous red-brown spine springs from their base rather on the inner side, curves over them and obliquely round their extremity, and so down the outer side of the digital joint, having its filiform point in contact with a semitransparent lobe near its origin.

Abdomen short-oval, very convex above, and projects slightly over the base of the cephalothorax. Its colour is a dark sooty brown, tinged with greenish.

Specimens of this very minute and rather puzzling species were met with by myself on furze-bushes and underwood at Bloxworth, in May, 1862.

In addition to the above twenty-four species, the following have come under my notice, either as new to Britain, or else as met with by *myself* for the first time; and I give them here as supplementary to the lists contained in Zool. 6493, 6862, 7553, 7945.

Family LYCOSIDÆ.

Hecaërge nemoralis, *Blackw.* A male and female adult of this species was met with by myself among heath at Bloxworth, in May, 1862. It is chiefly distinguishable from *H. spinimana* by its darker colour, and by being almost wholly clothed with long, fine, silky hairs.

Family SALTICIDÆ.

Salticus scenicus, *Koch.* The species hitherto commonly known under this name by British arachnologists appears to be *Salticus histrionicus*, *Koch.* My attention was first drawn to the fact that there were two species confounded together under the name "scenicus" in June, 1862, on the capture of an adult male and female of the true *scenicus* among heath, near Bournemouth, Hants. These, appearing to me different from the ordinary run of what I had usually considered to be of this species, caused me to examine carefully a large number of specimens captured here and in other places. The result of this was that I found two undoubted species mixed together; and on consulting, a short time after, Westring's 'Araneæ Suecicæ,' I found both species well and accurately distinguished. The commoner of the two—*i. e.*, the one I have most frequently met with, on walls of houses, gate-posts, palings, &c.—is *S. histrionicus*, *Koch* and *Westring*; the other, which I have only as yet met with rarely and among heath, is *S. scenicus*, *Koch.*

Salticus terebratus, *Koch.* An adult male and female captured by myself on a garden wall at Southampton, in August, 1862. This is its first record as a British species.

Family THOMISIDÆ.

Philodromus jejunus, *Panzer.* An immature female of this species (new as British) was given me in June, 1862, by Mr. Dale, of Glauvilles Wooton, who captured it among lichens on an apple tree. Since that I have met with several, both males and females, on apple trees and Scotch firs, but none adult. I am almost inclined to think it is but a variety of *P. pallidus*.

Family AGELENIDÆ.

Agelena subfusca, *Camb.* Males of this species were recorded as new to Science in Zool. 7559 and 7947; but the female has been until now unrecorded. I met with a single specimen of that sex, adult, in June, 1862, at Bloxworth.

Family THERIDIIDÆ.

Theridion stictum, *Camb.* An adult male was captured by myself at roots of heath, in May, 1862. Before that time only females had been observed.

Theridion riparum, *Blackw.* I met with an adult male of this species under the rooty ledge of a sand-bank at Bournemouth, Hants, in June, 1862.

Family LINYPHIIDÆ.

Neriëne parvula, *Westring.* An adult male and female on iron railings, at Bloxworth, in May, 1862. New to Britain.

Neriëne dentata, *Wider.* An adult male and female on the wood-work of an old weir, near Bloxworth, in June, 1862.

Neriëne abnormis, *Blackw.* An adult male and immature female at roots of heath, at Bloxworth, in May, 1862.

Neriëne dentipalpis, *Wider.* This species is very closely allied to *Neriëne longipalpis*, and has long escaped distinction from that species by British arachnologists. Mr. Blackwall lately called my attention to its distinguishing peculiarities, by a reference to its description in Westring's 'Araneæ Suecicæ;' and on examining my specimens of *N. longipalpis* I found many specimens of *N. dentipalpis* among them. This is its first record as a British species, though the credit of its discovery is due entirely to Mr. Blackwall.

Walckenäera hiemalis, *Blackw.* An adult male of this species was met with on iron railings, at Bloxworth, in May, 1862. The species recorded as *W. hiemalis* (Zool. 7561) appears, on examination, to have been so named by mistake; and it turns out to be a very distinct and undescribed species; now, however, described above, under the name of *W. altifrons*.

Walckenäera obscura, *Blackw.* An adult male on iron railings, at Bloxworth, in April, 1862; also one in March, 1863, in the same place.

Walckenäera picina, *Blackw.* Males and females (adult) of this species tolerably abundant on iron railings, at Bloxworth, in April and May, 1862.

Walckenäera fuscipes, *Blackw.* Males and females (adult) among moss in woods, and one male on iron railing, Bloxworth, in March, 1863.

Family EPEIRIDÆ.

Epëira patagiata, Koch. A male adult, and both sexes immature, of this species, on trees and furze-bushes, at Bloxworth, in a low damp situation, in June, 1862.

Tribe SENOCULINA.

Family SCYTODIDÆ.

Savignia frontata, Blackw. Males of this remarkable species were not rare on iron railings, at Bloxworth, in March and April, 1862, and in March, 1863. Mr. Blackwall, unable to discover a fourth pair of eyes in this species, has included it (in its present position) among the six-eyed spiders (Senoculina). I have constantly fancied myself able to discover a fourth pair, though sometimes with great difficulty, at the apex of the frontal eminence; and I am borne out in my idea by the microscopical investigations, directed specially to this point, of Mr. Richard Beck (Lister Works, London); though, as the matter at present stands, Mr. Blackwall is yet doubtful on the point. Westring describes this species under the name *Erigone conica* ('*Araneæ Suecicæ*,' p. 220); and he there says, "Oculos duos intermedios anticos, ægre observandos," which exactly agrees with my own observations. In the event of its being decided to have *eight* eyes, it will have to be removed to the genus *Walckenæra*, with which it agrees in all generic characters, as well as by its general form and size.

O. PICKARD-CAMBRIDGE.

Bloxworth, Blandford, Dorset,
April 1, 1863.

On the Name "Lithosia molybdeola."—The Rev. Joseph Greene having mentioned my name (Zool. 8468) in connexion with the *Lithosia molybdeola* of Guenée, I feel compelled, though very reluctantly, to say a few words on the subject. I admit that Mr. Gregson's name "*sericea*" was published in the '*Intelligencer*' before my friend M. Guenée's '*Monographic Notice of the European Species of the Genus Lithosia*' appeared in the '*Transactions of the Entomological Society of France*'; but the practice of describing new species in ephemeral periodicals like the '*Intelligencer*' is very objectionable.* In October, 1859, I sent specimens of all our *Lithosiæ* (except *L. quadra* and *L. rubricollis*) to M. Guenée, and among them two

* M. Guenée's paper upon the European *Lithosiæ* was read at the Meeting of the Entomological Society of France, on the 12th of December, 1860, and published immediately afterwards in the '*Annales*.'